Kawasaki Journal of Medical Welfare Vol. 9, No. 2, 2003 49–57

Essay

The Emergence of "Oral Health Care for the Disabled"

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(Accepted November 22, 2003)

Key words: dentistry, handicapped, history, early days

Abstract

This article aims to introduce a specialty field in dentistry existing now, which deals with dental and oral health problems among the disabled and also to those in the co-medical and social welfare field, but with no relation to dentistry. Particular focus in this article is given to persons who have acted as pioneers during the period from the late 1940's to the beginning of the 1960's in the United States of America, the U.K., Scandinavia and Holland. In the case of the USA, the name of Dr. Manuel M. Album is important. He has been called the "father of the field", and Dr. S.N. Rosenstein is also cited. In Europe, the focus was given to Drs. Peter Westphal, E.Kisling, J.N. Swallow and Ab Heybour.

This specialty of dentistry first started as a way to deal with children and those with developmental disabilities. The subjects, however, to be dealt with by this field have changed over time as ideas in social thought have changed to feature what is important today, and it is still going to be changed in the future. This papar will be the prologue for this historical review with an intention to continue in the forthcoming series of review works.

Preface

Within the clinical phases of dentistry, there exist a number of specialty fields. Scientific studies revealed more clearly latent dental problems or ones that had previously not existed, then, the new findings stimulated an increasing demands for solutions. Thus, particular groups dealing with those up and coming problems started to propose new specialties in the field of dentistry. Oral Health Care for the Disabled was one of the fields proposed. Most dental specialties are based on treatment technology procedures or specific dental diseases. In contrast to those fields, Oral Health Care for the Disabled is based on the type of service and more on type of patient or client who are subjected to the service.

Oral Health Care Service for the disabled also has been affected by social factors outside the realm of dentistry. This field of specialty first emerged as "Dentistry for the Handicapped", then its name changed over time as the philosophy of caring for the disabled changed. The prime purpose of this article is to reveal how this field emerged over the last 50 years, with particular focus on the era of emergence, i.e., from 1945 to 1960.

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Emergence

The need for oral health care always exists, but the solutions for individual problems sometimes are hard to come by. Idealistically, the dental profession claims ethical responsibility for responding to such demands, but often what is said from the dental public health standpoint is not reflected in the clinical area. Yet the dental profession managed to call attention to the needs and demands for dental care service.

Dental care service for children appeared at the beginning of the 20th century. Until that time, dentistry existed only for the adult population and dental care for children had been neglected. It first occurred in northern Europe, but rapidly spread out to the rest of northern Europe, Scandinavia and finally the United States. Although World War II interrupted the movement, the wave already had reached Japan by the late 1920's. After World War II, this area grew further and established itself as pedodontics and later moved into the present as pediatric dentistry. The field of pedodontics that offers dental health care

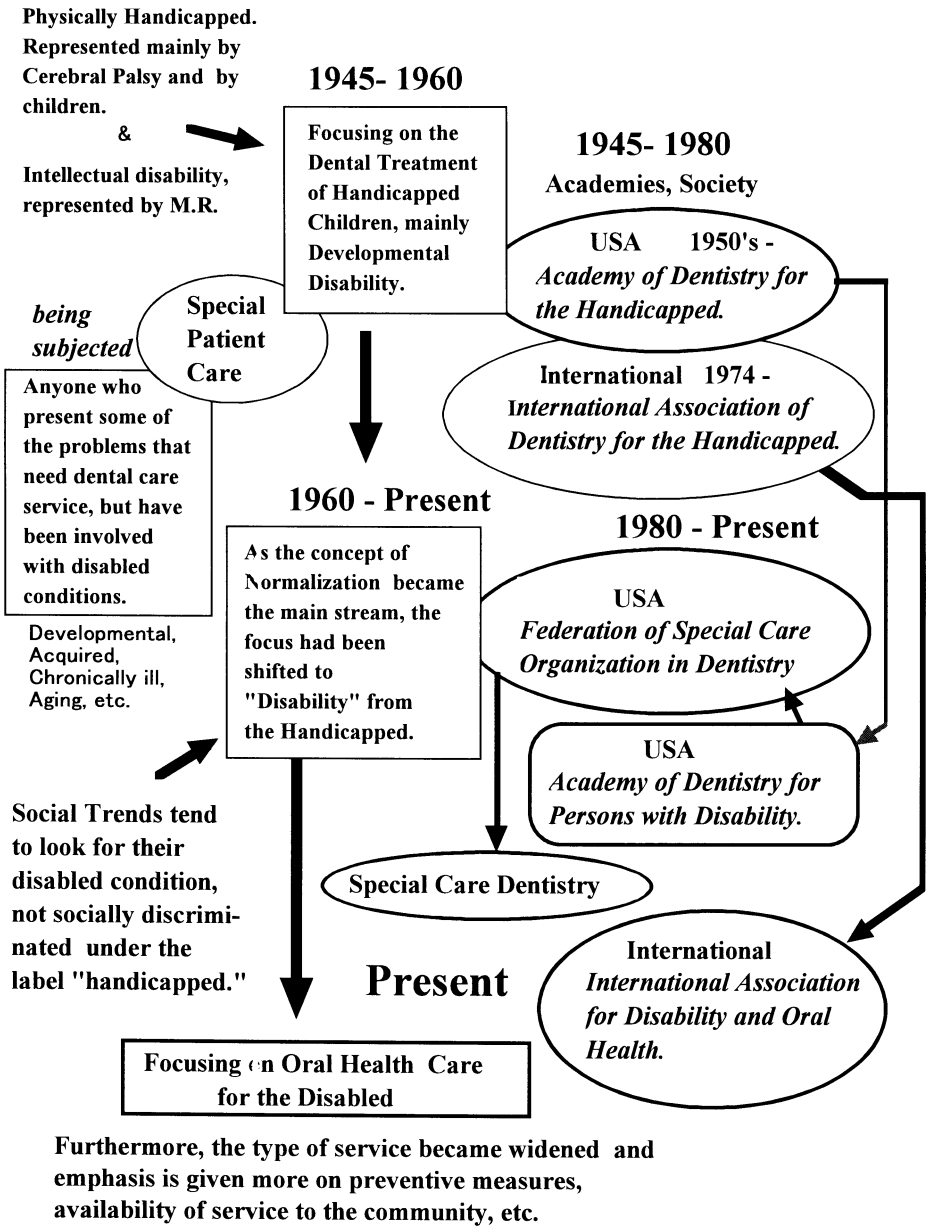

Fig. 1 Nomenclature of this field of specialty has changed from time to time, being affected by the changing stream and social thought in the idea of Social Welfare concept.

service for children became well organized in shape and educational programs appeared in many dental schools in the United States. Dental treatment service for children became routine. There was, however, a group of children who were excluded from this fruitful dental health care.

They were a group of children who were being called the handicapped. In those days, a similar philosophical movement occurred for handicapped children that had once appeared for ordinary children in the beginning of the 20th century. Wayman [1] used a similar expression in the preface of his book indicating the existence of a group of children who were left out from the benefits of pedodontic care and called them "Dentally handicapped" as well as socially handicapped.

The movements calling professional attention to the problems existing among disabled children first took place in the United States, the UK, and Scandinavian countries after World War II. In this article, the focus will be given on those dentists who worked in that period of time, to which I will attach the label "era of cradle".

Movements and proposition made from 1945 to 1960

The articles in dental journals reviewed for this period were provided by the American Academy of Dentistry for the Handicapped. [2] Since the resources were produced before the computer age, the material does not reflect the entire published history of the time, but it allows one to see the trends at the time and who made a unique voice in the dental profession.

The list of references seemed to circulate amongst members from 1956 only the next several years. And the resources for 1960 included some publications from 1959 or even before, so they were included in this review, too. The total articles listed were 143. Actual publications made in this period should be more than this number, as some of the well known articles were not listed here. Among these items, some were published even before1941, however, the majority of articles start from the 1950's. The most frequently appearing authors were Dr. G. Teucher, F.F. Lamons, A. O. Watson, S.N.Rosenstein, M.M. Album, M. Cohen, M. Massler, R.L. Lindahl, J. E. R. Mink, and T.K. Barbar. They were from either the field of pedodontics or dental public health. Some like J. J. Adelson, represented the field of anesthesia. From Europe, there were names such as Dr. E. Kisling and B. Rud of Denmark.

The most frequently appearing name was Dr. Album of Philadelphia. The earliest description calling the attention of the dental profession to the dental problems of handicapped children appeared in 1935 by B. E. Champion. [3] Though the numbers remained scarce, there were some articles published before World War II and even during the war time. Then, many leading pedodontists in the educational area began to contribute articles in order to call attention of dentists to the needs of dental care among handicapped children. During this period, the majority of articles that appeared were of the essay type.

They dealt with the oral aspect, and the needs of dental care. Very few mentioned psychological or physiological aspects that the dentist should know about when trying to deal with handicapped children. On the clinical management of those patients with either cerebral palsy or mental retardation now being called the intellectually dis- abled), application of general anesthesia had been considered as a suggested solution [4]. Dr. Album added the utilization of pre-medication [5] for the solution of behavioral management, which originally had been a part of general anesthesia procedures.

Some of the scientific articles that came out in those days were studies on enamel hypoplasia observed in some types of children with cerebral palsy, [6] or gingival hyper- placia [7] observed in epileptic children due to the administration of anti-convulsant agents.

Pioneers who initiated the dental care for handicapped children

Pedodontics, a specialty in dentistry, had just come into place by the late 1940's in the United States and many dental schools started to install graduate programs. By the 1960's, the topic of dental care for the handicapped was included in the curriculum of many pedodontics courses at graduate level education.

However, differing views on this subject existed at that time. In particular, two pioneers came up with competing philosophies. One was the previously mentioned Dr. Album of Philadelphia, who was active both at Children's Hospital of Philadelphia and the University of Pennsylvania School of Dentistry. The other person was Dr. S.N. Rosenstein of the Columbia University School of Dental and Oral Surgery.

In Scandinavia, Professor Kisling of Denmark [8] had already established a foundation for their research. However, their approach to render dental care service was somewhat different from that of the United States. Differing approaches could also be found in the U.K. and Sweden. Therefore, my comments will extend to Dr. P. Westphal of Sweden and Dr. J. N. Swallow of the UK. Also, a brief introduction will be made on Dr. Ab. Heybour of Holland, who was a practitioner in Arnhem in Holland. Although there were a number of his groups that appeared in the next generation. Dr. Heybour's efforts were passed on to Dr.Burgersdyk of Nimegen University.

Columbia University vs Pennsylvania University

In the early 1950's, Dr. Album led clinical activities at both Philadelphia Children's Hospital and Pennsylvania University. He named the clinic at the university "the Special Patient Clinic", and tried to avoid using the term "handicapped", though the term "dentistry for the handicapped" was more common at the time. It was not until the next decade that the term special patient appeared again in a book published by Davidoff et al.[9] Dr.Album, however, would be the first person to use this term in dentistry. He also emphasized the benefit of using general anesthesia and later premedication, which became known as the pharmacological approach. He also emphasized the necessity of paying attention to the reaction of the body system in his out-patient clinic at the university. The usage of the so called "pharmacological approach" was done mostly at Children's Hospital.

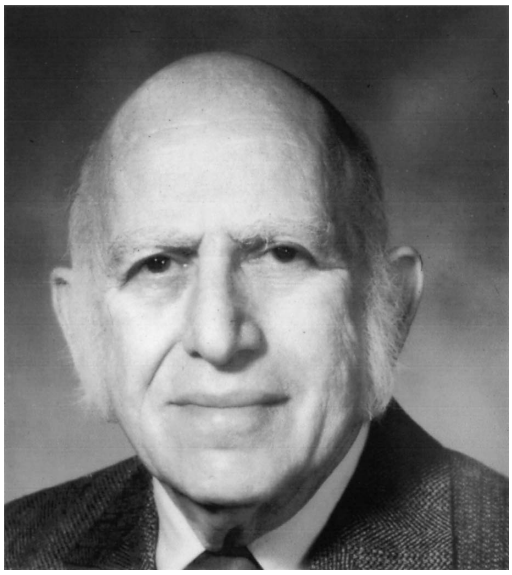

Fig. 2 Dr. M. M. Album Pioneer in Dentistry for the Handicapped. Founder of "American Academy of Dentistry for the Handicapped" and "The International Association of Dentistry for the Handicapped"

There was another movement in the New York City area during this period. A very prominent public health dentist, who kept a position at the city office and was in charge of the entire public health program of the city, not only limited to the dentistry, called attention to the need for caring for handicapped children. Dentists in the public health field, dental and pedodontists in educational institutions such as Dr Rosenstein or an administrator like Dr. Tobin of Guggenheim, were discussing the possibility of offering dental care to the handicapped children in the NYC area. Their activities were somewhat related to the Dental Guidance Council for cerebral palsy, which finally resulted in the birth of the C.P. Clinic at Columbia University School of Dental and Oral Surgery. [10] Columbia University was the first to install a graduate level training program with a fellowship sponsored by the foundation. Though the clinic's name was the CP clinic, its activities were not limited only to cerebral palsy patients and children. The program was under the administration of the department of pedodontics. The trainees, however, were not only being certified as pedodontists but were gaining expertise in how to deal with disabled children. In spite of this administrative procedure, the actual clinical service was also rendered to adult patients. Later in the mid 1960's the program became an M. S. Degree course with a federal grant. Among the first class of this MS program, there was Dr. A.J. Nowak, who wrote a first text book [11] on dentistry for the handicapped.

In the 1960's, the program was further extended to include sick children from the Pediatric ward of Presbyterian Hospital. Though Dr. Rosenstein showed an interest in using medication he did not extend it to the use of general anesthesia for educational purposes at the dental school. He rather tried to explore the procedure to render the treatment under ordinary dental settings.

To contrast both pioneers, it was Dr. Album who established the names and activities in new dental fields so that it resulted in him being named as the "father of dentistry for the handicapped". In the 1950's he organized the group later called the American Academy of Dentistry for the Handicapped, with Dr. M. Cohen of Boston and Dr. H. Kopel. of Detroit. His efforts led further in the 1970's to the forming of an international organization. It was named the International Association of Dentistry for the Handicapped. He also twice hosted workshops on dentistry for the handicapped at Pennsylvania University in the late

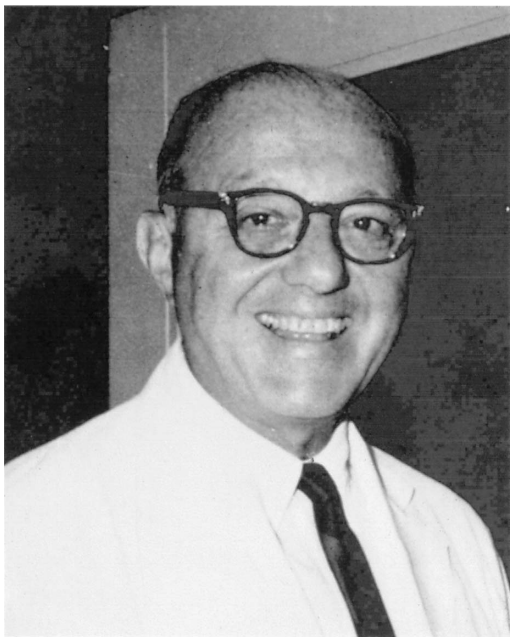

Fig. 3 Dr. S. N. ROsenstein. Pioneer in NYC area. Chaired the "Cerebral Palsy Fellowship Program" at Columbia University School of Dental and Oral Surgery.

50's and early 60's, which were the first in the United States and perhaps in the world.

In contrast to the enthusiastic and energetic activities by Dr. Album, Dr. Rosenstein of Columbia University was rather a quiet person by nature. He established and maintains a good reputation among the physicians who treat handicapped patients. His C.P. Program was involved in a number of medical fields at Columbia University Medical Center. Students were able to enjoy the fruits of this program, like days they experienced in the Neurological Institute and the Pediatric Department of the Hospital. The lectures students can take are more often focused on the medical field, rather than just for dentistry. Dr. Rosenstein had more opportunities for giving lectures to medical groups, and his articles contributed more to the medical field. It is interesting that one of his students in the mid 1960's became a leading expert in the field of dentistry for the handicapped and chaired the pedodontic department at the Kennedy Institute for the Mentally Retarded in Albert Einstein Medical College where he adopted the pharmacological approach as routine. However, the reason why he came to favor the use of the pharmacological solution should not be counted as simply because of its stated benefits for behavior management but as a result of multiple factors that were to be found at the hospital. Socioeconomic factors were one aspect that led him to this approach. His senior fellow at the course had turned himself to public dental health after completing the C.P. course and sought a graduate degree at the School of Public Health. He subsequently became a leading advocate for oral health care service for the disabled. Dr. B.Waldman of New York University at Stony- Brook is his name.

Scopes in the Europe

Professor E. Kisling of Demark is well known as an educator in pedodontics but he is also known as a person who wrote prominent research reports on Down syndrome, which was his thesis work in the 1950's.

When I first visited Denmark and stayed with him for a week, I acquired a deep impression from the words he told me. Contrary to my expectations, he said that dentistry for the handicapped was just started in Denmark" in clinical phases and as a system to provide a service. What professor Kisling said was that they had paid particular attention to evaluating the dental problems existing at the first stage. Then, their work was more concerned about securing technology for how dental care service should

Fig. 4 Dr. J. N. Swallow. Explored the "Welsh Way" of providing, an Oral Health Care Program in the area and secured the responsibility of the dental school to the community where it was located. A person withholding very stoic character in nature and views dentistry from the socio-psychological aspect. The first Secretary / Treasure of IADH.

be provided. Research on this aspect took place at a teaching institution, the Royal Dental College in Copenhagen. Dr. B. Rud, who was an associate to Prof. Kisling, dealt with the management problems. At the beginning of the 1970's, Prof. Kisling decided that the time had come to lay out a plan for initiating a pilot program at an institution named Vangade in Copenhagen, and eventual extention to other institutions remaining throughout the country. With this plan, he thought the entire country of Denmark would be covered within three years.

A similar concept for attempting to explore the system was followed by J.N. Swallow of Wales, UK. [12]. He first carried out a survey in Wales to know what kinds of needs and demands were existing in Wales. Then he secured the roll of the dental school already existing in the region in order to meet the needs and demands for dental care among the disabled. He then came to the conclucsion that the first thing to do is to train young staff who could lead the care program for the disabled in their selected lines of expertise. For this purpose, he assigned one of his junior staff to go into the study of psychology and made her an expert in dealing with intellectual or leaning disabilities. Others were assigned to the physically disabled, for example, with particular concentration to the cleft palate, or speech disorders, or motor dysfunction. In this way, he was able to establish a unique way of providing dental service to the inhabitants in Wales and to set up teaching institutions in the area.

Clinical trials took place first and when it proved successful, they stimulated more colleagues to get involved. As clinical trials progressed, then, academic approaches came later. Those are footnotes often observed in United States. Controversially in Europe over all, what was seen at the time was to first analyze the problem and then follow by securing a solution, and then lay out a program. This seemed to be the European way at the time.

Dr. Peter Westphal of Sweden

Dr. Peter Westphal seems to have played a significant role in the activities of the International Association of Dentistry for the Handicapped (IADH). In the early days of IADH history, when the first secretary / treasurer, Dr.J.N. Swallow resigned his position at the Israel meeting, Dr. Westphal took over this task for many years. This was a period of re-organization for the IADH. He also chaired the third international

Fig. 5 Dr. P. Westphal of Sweden, the second Secretary / Treasurer of IADH. So devoted to establishing the foundation of the IADH. One of the leaders in the Nordic Society of Dentistry for the Handicapped and Sweden as well.

congress in Stockholm where the installation of IADH had been adopted. The two meetings before Stockholm were in Atlantic City N.J., and Amsterdam respectively, and were hosted by each country's national academy. The third congress at Stockholm was also hosted by the local society, the Nordic Society of Dentistry for the Handicapped. However, the general assembly at Stockholm finally adopted a motion to install an International Association, which would begin to control the overall organization activities from the London meeting two years hence.

Dr. Westphal, originally the chief dental officer of a dental service at one of the institutions in Stockholm, had served for government public health administration throughout his whole life. Shortly before retirement, however, he started his volunteer work for leprosy in India and continued it until the end of his life. He was a really big man, not only in physical size but also for his broad and sweet heart. His devotion to oral health care for the disabled and his work in establishing the foundation of the IADH should be noted.

Ab Heybour and Holland

A young dentist in practice in a small town named Arnhem in Holland started his volunteer work at the Het Dorp institution. This institution was known for being a unique experimental community for the physically handicapped [13]. In 1971, I visited the Het Dorp and observed his way of providing dental care service to the physically disabled in various degrees. What made me surprised was that the dental settings had nothing special to work with those types of patients, they were very routine. It was just an ordinary dental office. With this facility he worked on inhabitants of the village, approximately 500 in the pharmacological approach or any specific means. Yet, he had completed all the necessary work for restoring the decayed tooth, extracting the severely involved tooth, and even prosthetics work for the region of missing teeth within approximately 3 years.

Het Dorp was one of the experimental institutions which aimed to reflect the new wave for normalization at that time, but in Dutch ways. Parallel to the uniqueness of the institution, dental treatment approaches that he had made were also unique as he tried to avoid employing any special procedures for the inhabitants at this experimental institution. He had faded out from this area very rapidly and moved into activities with the Dental Association Administration, but his foot-note was handed over to Dr. Burgersdyk. Dutch people seem to have their own way of providing dental care for disabled people and their way of reflecting normalization.

Summary

Looking back through the history of "Oral Health Care" for disabled people, I would most like to recall the first ten to fifteen years after the second world war as a time of emergence. This was the time when dental and oral health care for the disabled was in its infancy period and I would like to call it the "era of cradle."

I explained how dentistry for the handicapped started and took the initiative and who worked for establishing its foundation. The characteristics and nature of the subject at that time, and why it was so, has been explained by introducing persons who were active at the time, and were also, many of them, pedodontists working on children. The next 15 to 20 years, up until 1980, was spent organizing 'real specialty fields of dentistry, but it was also a time when, while this normalization of the field was going on, its scope was expanding into more types of disability as a subject for dental care service. The demands and needs of dentistry for the handicapped, the solutions, and the subject-patient/client relationship were

always changing, and were often affected by the social thought of the community at large.

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